

Remarks/Arguments

Applicants have received and carefully reviewed the Office Action mailed March 31, 2009. Claims 14-36 remain pending. Claims 14 and 16 have been amended, and claims 35 and 36 are newly presented. Support for the amendments and new claims can be found in the specification, claims, and drawings as originally filed. No new matter has been added. Favorable reconsideration is respectfully requested in light of the following remarks.

**Rejections under 35 U.S.C. § 112**

Claim 14 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In the Office Action, it was stated “Claim 14 recites the limitation ‘it’. There is insufficient antecedent basis for this limitation in the claim.” Without agreeing with or acquiescing to the rejection, claim 14 has been amended to remove the rejected language. Withdrawal of the rejection is respectfully requested.

**Rejections under 35 U.S.C. § 102(b)**

Claims 14, 16, and 26-28 were rejected under 35 U.S.C. §102(b) as being anticipated by DE 197 33 768. After careful consideration of the rejection, Applicants must respectfully disagree. Claim 14 recites:

14. (Currently Amended) A mixing device for mixing gas and combustion air for a gas burner, ~~it being possible for a mixture of gas and combustion air that is provided by the mixing device to be fed to the gas burner by means of a blower, said mixing device comprising:~~

a housing; and

a venturi nozzle, wherein the venturi nozzle is integrated in the housing in such a way that the housing and the venturi nozzle are formed as a *monolithic* unit.

In order to anticipate, the cited reference must disclose each and every claimed element and feature in at least as much detail as is claimed. DE 197 33 768 fails to do so. For example, DE 197 33 768 does not appear to disclose “a housing; and a venturi nozzle, wherein the venturi nozzle is integrated in the housing in such a way that the housing and the venturi nozzle are formed as a *monolithic* unit.” A machine translation of the specification of DE 197 33 768 does not appear to describe monolithic construction, but

did yield the following statement: "The figures of the design show the article according to invention partly strongly schematized and are not necessarily full-scale to be understood." (Column 2, lines 60-63, translated at <http://balefish.yahoo.com>) Applicants submit that it is improper to infer a monolithic construction from the "strongly schematized" figures of the reference, if that is where the Examiner believes that feature is taught. Because DE 197 33 768 is in not in the English language, Applicants respectfully request that the Examiner obtain a translation of those parts relied upon by the Examiner if the Examiner elects to maintain this rejection.

The Examiner may be attempting to suggest that the elements of claim 14 that are missing from DE 197 33 768 are somehow inherent in DE 197 33 768. However, MPEP § 2112 IV states:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)...

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

(Emphasis added). Applicants do not believe it can readily be argued that the feature "the housing and the venturi nozzle are formed as a *monolithic* unit" is necessarily present in DE 197 33 768. Nor would there appear to be any reason or motivation to modify DE 197 33 768 to arrive at the mixing device of claim 1. For these and other reasons, claim 14 is believed to be clearly patentable over DE 197 33 768. For similar and other reasons,

claim 16 which depends from claim 14 and includes significant additional distinguishing features, is also believed to be clearly patentable over DE 197 33 768.

Turning now to claim 26, which recites:

26. (Previously Presented) A gas burner, comprising:  
a combustion chamber;  
a mixing device adapted to mix gas and combustion air, the mixing device including a housing and a venturi nozzle, wherein the venturi nozzle is integrated in the housing in such a way that the housing and the venturi nozzle are formed as a monolithic unit;  
a blower; and  
the blower, when activated, acting on the mixing device to suck in a mixture of gas and combustion air provided by the mixing device and feeding the mixture to the combustion chamber.

For reasons similar to those discussed above with respect to claim 14, as well as other reasons, claim 26 is believed to be clearly patentable over DE 197 33 768. DE 197 33 768 does not appear to teach each and every element of claim 26, in at least as much detail as is contained in claim 26. For example, DE 197 33 768 does not appear to teach “wherein the venturi nozzle is integrated in the housing in such a way that the housing and the venturi nozzle are formed as a *monolithic* unit...” as recited in claim 26. For the foregoing and other reasons, claim 26 is believed to be clearly patentable over DE 197 33 768. For similar and other reasons, claims 27 and 28 which depend from claim 26 and add significant additional distinguishing features, are also believed to be clearly patentable over DE 197 33 768.

**Rejections under 35 U.S.C. § 103**

Claims 20-25, 29, 30, and 32-34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over DE 197 33 768 in view of U.S. Patent No. 3,468,298 (Teague, Jr. et al.). After careful consideration, Applicants must respectfully disagree.

Independent claim 14 from which claims 20-25 depend is distinguished above as being clearly patentable over DE 197 33 768. Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 14 is believed to be clearly patentable over both references. Claims 20-25 include the elements of independent claim 14 and thus are also believed to be clearly patentable over DE 197 33 768 and Teague, Jr.

et al. for at least the same reasons. Claims 20-25 also add significant further distinguishing features.

Independent claim 26 from which claims 29, 30, 32, and 33 depend is distinguished above as being clearly patentable over DE 197 33 768. Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 26 is believed to be clearly patentable over both references. Claims 29, 30, 32, and 33 include the elements of independent claim 26 and thus are also believed to be clearly patentable over DE 197 33 768 and Teague, Jr. et al. for at least the same reasons. Claims 29, 30, 32, and 33 also add significant further distinguishing features.

Turning now to claim 34, which recites:

34. (Previously Presented) A mixing device for mixing gas and combustion air for a gas burner, said mixing device comprising:  
a housing, the housing having side walls that define a venturi nozzle that forms a flow duct, the flow duct having an inlet opening for accepting combustion air and an outlet opening for providing a mixture of gas and combustion air; and  
a gas inlet opening extending through a side wall of the housing, the gas inlet opening defining a recess for receiving a gas outlet stub of a gas regulating device.

In the Office Action, it was stated that Teague, Jr. et al teaches “a gas regulating device (5) fastened relative to a mixer unit (107,109), the gas regulating device including a gas outlet stub (105) that is insertable into a corresponding recess in the monolithic unit.” Applicants submit that this interpretation does not appear to be substantiated by the actual disclosure of Teague, Jr. et al. The Examiner’s descriptions of the numbered items of Teague, Jr. et al. do not appear to be very accurate (e.g. 5-control housing, 107-annular chamber, 109-radial holes, 105-orifice). Nomenclature aside, Figure 2, which was cited by the Examiner, does not appear to support the Examiner’s interpretation of the various elements. For example, the Examiner identifies 105 as a gas outlet stub (of a gas regulating device) insertable into a corresponding recess in the monolithic unit. However, claim 34 recites that the gas outlet stub is received by a recess of the gas inlet opening which extends through a side wall of the housing, where the side walls define a venturi nozzle. Even if 105 were analogous to the claimed gas outlet stub, which it does not appear to be, the (unnamed) wall of Figure 2 into which 105 is threaded does not appear

to be one of the (also unnamed) housing walls that define the venturi nozzle (i.e., the walls through which radial holes 109 extend. Rather, the wall (unnamed) of Teague, Jr. et al. that is threaded (105) appears to be separate from the venturi nozzle housing, and in fact, appears to define (in part) an annular chamber 107 that is an antechamber around the venturi nozzle. For these and other reasons, claim 34 is believed to be clearly patentable over the combination of DE 197 33 768 and Teague, Jr. et al.

Claims 15, 17, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 33 768 in view of U.S. Patent Application Publication No. 2001/0055709 (Sang). After careful consideration, Applicants must respectfully disagree.

Independent claim 14 from which claims 15, 17, and 18 depend is distinguished above as being clearly patentable over DE 197 33 768. Sang does not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 14 is believed to be clearly patentable over both references. Claims 15, 17, and 18 include the elements of independent claim 14 and thus are also believed to be clearly patentable over DE 197 33 768 and Sang for at least the same reasons. Claims 15, 17, and 18 also add significant further distinguishing features.

Applicants further note that while Sang may, as background, disclose that laval or venturi nozzles may be made of plastic, it does not necessarily appear to teach making monolithic nozzles of plastic. Furthermore, the teachings of Sang appear to focus on flow bodies made up of at least a first and a second segment (Abstract), which would appear to teach away from a monolithic construction.

Claims 19 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 33 768 in view of Sang or Teague, Jr. et al, respectively, as applied to claims 18 and 29, respectively, and further in view of GB 1397536. After careful consideration, Applicants must respectfully disagree.

Independent claim 14 from which claim 19 depends is distinguished above as being clearly patentable over DE 197 33 768. As noted above Sang does not appear to remedy the noted shortcomings of DE 197 33 768, nor does GB 1397536. Thus, claim 14 is believed to be clearly patentable over the three references. Claim 19 includes the elements of independent claim 14 and thus is also believed to be clearly patentable over

DE 197 33 768, Sang, and GB 1397536 for at least the same reasons. Claim 19 also adds significant further distinguishing features.

Independent claim 26 from which claim 31 depends is distinguished above as being clearly patentable over DE 197 33 768. As noted above, Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768, nor does GB 1397536. Thus, claim 26 is believed to be clearly patentable over the three references. Claim 31 includes the elements of independent claim 26 and thus is also believed to be clearly patentable over DE 197 33 768, Teague, Jr. et al., and GB 1397536 for at least the same reasons. Claim 31 also adds significant further distinguishing features.

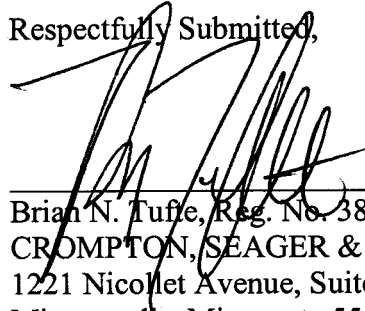
### **New Claims**

Applicants have added new claims 35 and 36, which depend from independent claim 14. As claim 14 is distinguished above as being clearly patentable over the cited references, it is believed that claims 35 and 36 are also patentable. Also, claims 35 and 36 provide significant further distinguishing features. For example, and in comparison with the disclosure of DE 197 33 768, claim 35 further recites that “the monolithic unit further defines a gas-routing duct configured to introduce fuel gas into the flow duct,” and claim 36 further recites that “the gas-routing duct is configured to introduce fuel gas through an opening that opens out radially into the flow duct.” DE 197 33 768 does not appear to teach a monolithic construction. Notably, features 12, 12’, and 12’’, schematically shown in Figures 1-5 of DE 197 33 768, appear to introduce gas into the device along an axial direction, which does not appear to be a configuration that includes a monolithic construction.

### **Conclusion**

In view of the foregoing, all pending claims 14-36 are believed to be in condition for allowance. Reexamination and reconsideration are respectfully requested. If a telephone conference might be of assistance, the Examiner is encouraged to contact the undersigned attorney at (612) 359-9348.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Brian N. Tufte', is written over a horizontal line.

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